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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,297	07/11/2003	Fan Wang	P/4076-56	4357
2352	7590	01/11/2005	EXAMINER	
OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			LEE, PATRICK J	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p>10/618,297</p>	<p>Applicant(s)</p> <p>WANG ET AL.</p>	
	<p>Examiner</p> <p>Patrick J. Lee</p>	<p>Art Unit</p> <p>2878</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 17 is objected to because of the following informalities:

Claim 17 appears to be a pseudo-independent claim. Claim 17 should have a preamble consistent to the claims on which it depends. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 7, 17-18, 24, & 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 03208348 A to Tabuchi.

With respect to claims 1 & 18, Tabuchi discloses a device to detect the presence or absence of a semiconductor element (2) as a target object; the device comprises collet (1), light emitter (3) as a source of light, and photosensor (4) as a light detector.

With respect to claims 7 & 24, the light is in the visible spectrum.

With respect to claim 17, Tabuchi discloses a collet assembly (1) to hold the semiconductor die (2).

With respect to claims 31-33, Tabuchi discloses the collet assembly to suck a semiconductor element (2) and to shine and detect a light to determine the presence or

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absence of the semiconductor element (2) by comparing the detected output to a reference voltage (51).

4. Claims 1-2, 4, 8, 10-12, 18-19, 21, 25, & 27-28 are rejected under 35 U.S.C. 102(b) as being anticipated by US 3,814,931 to Kuroda et al.

Kuroda et al disclose a device for inspection of pharmaceutical bodies and caps (12-13) held by collets (14). The device comprises a light source (21), beam splitter (22), and detector (26).

With respect to claims 1 & 18, Kuroda et al disclose a source of light (21), a light detector (26) for detecting the reflected light from target object (12-13).

With respect to claims 2 & 19, Kuroda et al disclose the light to be incident at an angle substantially normal to the orientation of the object (see figure 2).

With respect to claims 4 & 21, Kuroda et al disclose a beam splitter (22) to deflect light from source (21).

With respect to claims 8 & 25, Kuroda et al disclose a lens (23) to focus the light.

With respect to claim 10, Kuroda et al disclose the light source (21) and detector (26) to be disposed on the same side.

With respect to claims 11 & 27, Kuroda et al disclose a mounting (25a) as a mask to serve as a dark background located on the opposite side of the site (see column 2, lines 47-52).

With respect to claims 12 & 28, the target object is inherently substantially transparent for light to pass through the pharmaceutical body and cap (12-13) in order to reach mirror (25).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 3, 5-6, 9, 13-16, 20, 22-23, 26, & 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,814,931 to Kuroda et al.

With respect to claims 3 & 20, Kuroda et al discloses the beam splitter (22) to reflect light from source (21), but Kuroda et al fail to disclose the use of the beam splitter to reflect light to the detector. It would have been obvious to one of ordinary skill to situate the beam splitter (22) to deflect light to detector (26) because this could allow for reduced horizontal size of the light emitting and detecting module; this change would affect the size vertically, but may allow for ease of movement of the device. Situating

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the light source to shine straight down could overcome any light signal loss caused by reflection of the light signal.

With respect to claims 5-6 & 22-23, Kuroda et al disclose the detector to be a photosensor, but fail to disclose the exact detector claimed. However, utilizing an image sensor or a power sensor would have been obvious to one of ordinary skill in the art because they are functionally equivalent in the duty of detecting light and converting that light signal into an electrical signal. Additionally, it would allow the device to detect the reflected light accordingly to accurately determine the presence or absence of the object.

With respect to claims 9 & 26, Kuroda et al fail to disclose exact specifics of the illumination beam; however, the use of a lens to focus a beam to 0.02 to 0.5 mm wide would have been obvious to one of ordinary skill in the art to allow enough light to be incident on the target object to reflect back to the detector to make an accurate determination of whether the target object was present.

With respect to claims 13-14 & 29-30, the refractive index of the object is not disclosed in Kuroda et al, but to use such a refractive index would have been obvious in order to distinguish the target object from the refractive index of the ambient air.

With respect to claims 15-16, the disposition of the light source and detector away from the assembly is not disclosed but would have been obvious to one of ordinary skill in the art, as it would allow for the device to function in harsh environments that could affect the performance of the devices.

Conclusion

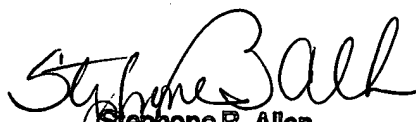
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J. Lee whose telephone number is (571) 272-2440. The examiner can normally be reached on Monday through Friday, 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick J. Lee
Examiner
Art Unit 2878

PJL
January 4th, 2005


Stephane B. Allen
Primary Examiner